

EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE

I. EXAMINER'S AMENDMENT:

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Colby C. Nuttall (Reg. No. 58,651) on 09/03/2009.

The application has been amended as follows:

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A computer-readable storage medium usable in a computer system for providing context information to an input method for enabling advanced input methods to achieve a higher accuracy recognition rate for text input to application fields

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by providing an architecture that supports applications or forms to specify what type of text input they are expecting in their text fields, the computer-readable storage medium including computer-executable instructions, including:

an input mechanism for inputting text into plurality of text fields for an application wherein each of the plurality of text fields are configured to receive a sequence of text characters;

a context component having first interface invocable by executable software code for setting first and second input scopes for respective first and second text fields of the plurality of text fields for the application, wherein an input scope is a subset of a language used to define what one or more words, numbers, or punctuations are allowed to be written and in what order they are allowed to be written to form a sequence of text characters in the text input field, and wherein the first and second input scopes are different input scopes and chosen from one or more of the following: a list of input scopes, a list of words or phrases, a common input scope, or a custom input scope; and

a recognizer operably coupled to the context component and input mechanism for invoking a second interface of the context component for receiving and applying the first and second input scopes for the respective first and second text fields such that as sequences of text characters are entered into each of the first and second text input fields, the sequence of text characters are compared with text within the respective first and second input scopes set in order to determine what text input is expected by the application for the respective first and second text input fields, wherein the recognizer further allows text input through the input mechanism to be inserted into the first text

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field and the second text field when the input text when it matches the one or more words, numbers, or punctuations and the order they are allowed to be written, from the first and second input scopes, respectively, wherein:

the first and second interfaces are selected from an extensible set of a plurality of available interfaces;

the plurality of available interfaces include at least one interface supporting input coercion constraining recognition of input to a specific definition of an input scope;

the plurality of available interfaces includes at least one interface not specifying input coercion, and recommending, but not constraining, recognition of input to a specific definition of an input scope; and

the computer-executable instructions further include a prioritizer that detects conflicting definitions and grants precedence to a custom input scope over a common input scope of a wordlist.

2. (Previously Presented) The computer-readable storage medium of claim 1 wherein the first interface invocable by the executable software code for setting the first and second input scopes for respective first and second text fields comprises a parameter for passing a list of words.

3. (Previously Presented) The computer-readable storage medium of claim 1 wherein the first interface invocable by the executable software code for setting the first and second input scopes for the respective first and second text fields comprises a parameter for passing a list of phrases.

4. (Previously Presented) The computer-readable storage medium of claim 1 wherein the first interface invocable by the executable software code for setting the first and second input scopes for the respective first and second text fields comprises a parameter for passing a common input scope.
5. (Previously Presented) The computer-readable storage medium of claim 4 wherein the common input scope comprises a defined format with an associated fixed list of characters.
6. (Previously Presented) The computer-readable storage medium of claim 1 wherein the first interface invocable by the executable software code for setting the first and second input scopes of the respective first and second text fields comprises a parameter for passing a regular expression.
7. (Previously Presented) The computer-readable storage medium of claim 1 wherein the first interface invocable by the executable software code for setting the first and second input scopes for the respective first and second text fields comprises a parameter for passing a set of input scopes.
8. (Previously Presented) The computer-readable storage medium of claim 1 wherein the second interface invocable by the recognizer for obtaining the first and second scopes for the respective first and second text fields comprises a method invoked for obtaining a set of input scopes.

9. (Previously Presented) The computer-readable storage medium of claim 1 wherein the second interface invocable by the recognizer for obtaining the first and second input scopes for the respective first and second text fields comprises a method invoked for obtaining a list of phrases.

10. (Previously Presented) The computer-readable storage medium of claim 1 wherein the second interface invocable by the recognizer for obtaining the first and second input scopes for the respective first and second text fields comprises a method invoked for obtaining a list of words.

11. (Previously Presented) The computer-readable storage medium of claim 1 wherein the second interface invocable by the recognizer for obtaining the first and second input scopes for the respective first and second text fields comprises a method invoked for obtaining a regular expression.

12. (Previously Presented) The system of claim 1 computer-readable storage medium the recognizer comprises a recognizer for speech.

13. (Previously Presented) The system of claim 1 computer-readable storage medium the recognizer comprises a recognizer for handwriting.

14. (Previously Presented) The system of claim 1 computer-readable storage medium the recognizer comprises a recognizer for an input method editor.

15. (Cancelled)

16. (Currently Amended) A method for providing context information to an input method for enabling advanced input methods to achieve a higher accuracy recognition rate for text input to application fields by providing an architecture that supports applications or forms to specify what type of text input they are expecting in their text fields, comprising the steps of:

invoking by executable software code first application programming interface for setting input scopes for a plurality of text fields for an application, wherein an input scope is a subset of a language used to define what one or more words, numbers, or punctuations are allowed to be written and in what order they are allowed to occur to form a sequence of text characters in a text field;

using the first application programming interface for setting a first input scope for a first text field of the application, the first input scope chosen from a plurality of available input scopes including one or more of a list of input scopes, a list of words or phrases, a common input scope, or a custom input scope;

using the first application programming interface for setting a second input scope for a second text field of the application, the second input scope chosen from the plurality of input scopes, which is different from the first input scope set for the first text field:
invoking a second application programming interface by a recognizer for obtaining one or more of the input scopes set for the plurality of text fields of the application;

using the second application programming interface for applying the first input scope set for the first text field of the application such that as a first sequence of text characters are entered into the first text field, the first sequence of text characters are compared with text with the first input scope set in order to determine what text input is expected by the application for the first text field, and such that the first sequence of text characters are displayed in the first text field only when they conform to the first input scope defining what one or more words, numbers, or punctuations are allowed, and the order they are allowed to occur;

using the second application programming interface for applying the second input scope set for the second text field of the application such that as a second sequence of text characters are entered into the second text field, the second sequence of text characters are compared with text within the second input scope set in order to determine what text input is expected by the application for the second text field, and such that the second sequence of text characters are displayed in the second text field only when they conform to the second input scope defining what one or more words, numbers, or punctuations are allowed, and the order they are allowed to occur, wherein:

the first and second application programming interfaces are selected from an extensible set of a plurality of available application programming interfaces;

the plurality of available application programming interfaces include at least one application programming interface supporting input coercion constraining recognition of input to a specific definition of an input scope; and

the plurality of available application programming interfaces include at least one application programming interface not specifying input coercion, and recommending, but not constraining, recognition of input to a specific definition of an input scope; and detecting conflicting definitions and granting precedence to a custom input scope over a common input scope of a wordlist.

17. (Cancelled)

18. (Previously Presented) The method of claim 16 wherein invoking the first application programming interface for setting an input scope for a text field of the application comprises passing a list of words.

19. (Previously Presented) The method of claim 16 wherein invoking the first application programming interface for setting an input scope for a text field of the application comprises passing a list of phrases.

20. (Previously Presented) The method of claim 16 wherein invoking the first application programming interface for setting an input scope for a text field the application comprises passing a common input scope.

21. (Original) The method of claim 20 wherein passing a common input scope comprises passing an identifier for a defined format with an associated fixed list of characters.

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22. (Previously Presented) The method of claim 16 wherein invoking the first application programming interface for setting an input scope for a text field of the application comprises passing a regular expression.
23. (Previously Presented) The method of claim 16 wherein invoking the second application programming interface for obtaining an input scope set for a text field of the application comprises obtaining a set of input scopes.
24. (Original) The method of claim 16 wherein invoking the second application programming interface for obtaining an input scope set for a text field of the application comprises obtaining a list of words.
25. (Previously Presented) The method of claim 16 wherein invoking the second application programming interface for obtaining an input scope set for a text field of the application comprises obtaining a list of phrases.
26. (Previously Presented) The method of claim 16 wherein invoking the second application programming interface for obtaining an input scope of set for a text field of the application comprises obtaining a common input scope.
27. (Previously Presented) The method of claim 16 wherein invoking the second application programming interface for obtaining an input scope of input set for a text field of the application comprises obtaining a regular expression.

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28. (Previously Presented) A computer-readable storage medium having computer executable instructions for performing the method of claim 16.

29. (Cancelled)

Information Disclosure Statement

II. The Applicants' Information Disclosure Statement, filed May 18, 2009, has been received, entered into the record, and considered. See attached form PTO 1449.

III. REASONS FOR ALLOWANCE:

Claims 1-14, 16, and 18-28 are allowed.

The following is an examiner's statement of reasons for allowance:

Interpreting the claims in light of the specification, Examiner finds the claimed invention is patentably distinct from the prior art of record as cited in independent Claims 1 and 16.

The features: “a context component having first interface invocable by executable software code for setting first and second input scopes for respective first and second text fields of the plurality of text fields for the application, wherein an input scope is a subset of a language used to define what one or more words, numbers, or punctuations are allowed to be written and in what order they are allowed to be written to form a sequence of text characters in the text input field, and wherein the first and second input scopes are different input scopes and chosen from one or more of the following: a list of input scopes, a list of words or phrases, a common input scope, or a custom input scope; the first and second interfaces are selected from an extensible set of a plurality of available interfaces; the plurality of available interfaces include at least one interface supporting input coercion constraining recognition of input to a specific definition of an input scope; the plurality of available interfaces includes at least one interface not specifying input coercion, and recommending, but not constraining, recognition of input to a specific definition of an input scope; and the computer-executable instructions further include a prioritizer that detects conflicting definitions and grants precedence to a custom input scope over a common input scope of a wordlist.”

The Examiner asserts that the claims overcome the prior art of record when the limitations are read in combination with the respective claimed limitations in their entirety.

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Dependent claims are allowed as they depend upon allowable independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact information

- IV. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-4093. The examiner can normally be reached on Monday - Friday from 9:00am – 30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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